

In re Patent Application of:

**LEVINE ET AL.**

Serial No. **09/656,393**

Filing Date: **9/6/00**

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**REMARKS**

Claims 1-49 remain in this application. Claims 1, 7, 9, 10, 11, 12, 18, 19, 20, 21, 22, 23, 24, 25, 26, 32, 34, 35, 36, 37, 42, 43 and 46 have been amended.

Applicants thank the Examiner for the detailed study of the application and prior art. At the outset, Applicants note the rejection of claims 1, 4, 6-10, 12-16, 18-20, and 22-25 as anticipated by published patent application no. 2002/0065700 to Powell et al. (hereinafter "Powell '657"). Other claims are rejected as obvious over Powell '657 in view of published patent application no. 2001/0051890 to Burgess; or Powell '657 in view of U.S. Patent No. 6,578,005 to Lesaint et al. (hereinafter "Lesaint"); or Powell '657 in view of U.S. Patent No. 6,535,883 to Lee et al. (hereinafter "Lee"); or Powell '657 in view of published patent application no. 2001/0049619 to Powell et al. (hereinafter "Powell '619"), or Powell '657 in view of Powell '619, and further in view of Burgess; or Powell '657 in view of Powell '619 in view of Lesaint.

Applicants submit with this Amendment a Declaration Under 37 CFR §1.131 from the inventors, Garry Fenimore and Kenneth M. Levine, which shows that the joint inventors conceived and reduced to practice as a working software prototype the subject matter of the above-identified patent application while working at MasterLink Corporation in Orlando, Florida, United States, prior to April 19, 1999, the effective date of Powell '657. The Declaration effectively removes Powell '657, Powell '619, Lee, and Burgess as references. Burgess has the effective reference date of March 17, 2000; Lee has the effective reference date of August 4,

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1999; and Powell '619 has the effective reference date of June 7, 1999.

The declaration shows that the Applicants worked diligently from conception to develop a computer implemented method for managing mobile workers in an object oriented programming environment. The Applicants worked diligently and reduced to practice as a working software prototype before April 19, 1999, a computer implemented method that classifies within a database of a computer a plurality of target objects that correspond to facilities assets to be worked on by a mobile worker. The attributes of each target object are defined, including tasks to be performed on each target object. Mobile workers are scheduled for the tasks to be performed by running a rule engine to determine the algorithms and heuristics to be used to schedule mobile workers for the tasks to be performed. A schedule of jobs is output to the mobile workers.

User configured system agents and software components are also built and automate the system environment for managing mobile workers. The system agents and software components are configured with user configured settings of a policy database that are reflective of a particular business. A job classification can be created within a planning agent module corresponding to a collection of tasks to schedule. The workers' skills and material are required to complete the tasks. Based on a plurality of rules contained within the rule engine, the workers' skills are matched with the tasks to be scheduled. A schedule for the mobile worker management is output.

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A simulator database can also be established for running a simulator program to establish policy values in a simulation of the working of a system environment to determine optimum policy values for a given business.

The initial conception of the present invention is reflected in Exhibits 1 and 2 of the 131 Declaration, which are copies of presentation documents that show how target objects can be classified. Attributes of target objects are defined, including tasks to be performed for scheduling the mobile workers. A rule engine is run to determine algorithms and heuristics to be used to schedule mobile workers while outputting a scheduled job to the mobile worker.

Exhibit 1, pages 7-10, are class diagrams that show which software definitions are required for each of a target definition class, tasks definition class, resource class, and job class. Page 11 of Exhibit 1 shows the problems associated with prior art paper-based systems. An improvement of the present invention formulates a policy with templates, reduces manual roles, automates planning, scheduling and dispatching, including two-way communication and mobile worker support teams through which a schedule of jobs can be output to the workers.

Exhibit 2 is a group of presentation documents showing different target definitions and task definitions that are input into policy rules. These rules include planning, scheduling and dispatching rules. Target definitions are operative with the policy rules. Each of the rules is operative with agents, for example, a planner, scheduler, and dispatcher agent. Work schedules, available resources, and jobs to be performed are output.

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The Applicants continued their work diligently on developing three elements for a system architecture, a physical architecture for the distributed intelligent work management system, and job state transitions. Exhibit 3 shows greater details of the type of work flow involved with the system architecture using different target and task definitions and rules and agents. The relationship between the physical architecture and the intelligent work management system, for example, is shown on page 18.

Page 19 of Exhibit 3 illustrates job state transitions and pages 20-25 show different classes, including the location class, resource class, task definition class, target definition class, action definition class, and policy class.

Before April 19, 1999, the Applicants worked diligently to develop the scheduling function, as set forth in Exhibit 4. At this time, and before April 19, 1999, the Applicants developed and reduced to practice a prototype software that was demonstrated and reported in a Confidential Brief of the Assessment of MasterLink Prototype Software Demonstration (Exhibit 5) just after the effective date of April 19, 1999. This brief is an assessment of the prototype software demonstration.

After April 19, 1999, the Applicants worked diligently to further develop the software and enhance operation of any simulation sections, including different agents, and the intelligent work management.

The Declaration and numerous exhibits show the diligent work of the inventors. As to the other cited references that the Declaration does not address to be

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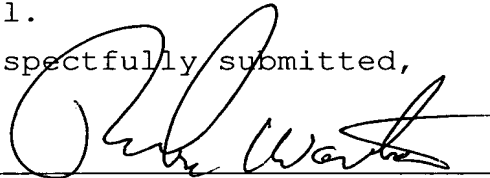
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removed, Applicants note that Lesaint is only directed to allocating tasks in which initial information relating to the tasks is allocated and schedules generated for allocating resource tasks. Individual schedules are modified and a stochastic system can be interrupted to allow a rule-based system to analyze schedules.

Nowhere does Lesaint or other references disclose or suggest the present claimed invention.

Applicants contend that the present case is in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and Issue Fee Due. If the Examiner has any questions or suggestions for placing this case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,



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**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **MAIL STOP FEE AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450**, on this 24<sup>th</sup> day of March, 2004.

